

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 1. This sheet, which includes Fig. 1, replaces the original sheet including Fig. 1.

Attachment: Replacement Sheet

Remarks

Claims 1-20 are pending in the application. Claims 1-15 were rejected and claims 16-20 were withdrawn in response to a restriction requirement. By this Amendment, claims 1 and 9 have been amended. Reconsideration of the claims is respectfully requested. No new matter has been added.

Claim Objections

Applicants have amended claims 1 and 9 to correct a minor typographical error. Thus, the objection to claims 1-8 is believed to be cured.

Rejection Under 35 U.S.C. § 112

Claims 4 and 10 were rejected under § 112, first paragraph as not being enabling. In a telephone conference on January 18, 2006, the Examiner indicated that this rejection would be cured if the curved arrow located near the left side of Figure 1 were deleted. Applicants have amended Figure 1 to delete this curved arrow to clarify that at least a portion of the spindle remains stationary relative to the cleaning member when the spindle is rotated. Thus, Applicants believe that this rejection has been cured.

Rejection Under 35 U.S.C. § 102

Claims 1-2, 7, 9, 11 and 14 were rejected under § 102(b) as being anticipated by U.S. Patent No. 2,619,009 issued to Begle (hereinafter “Begle ‘009”). Applicants respectfully believe that a *prima facie* case has not been established for the following reasons.

Independent claims 1 and 9 recite “a housing disposed around and spaced apart from a spindle.” Begle ‘009 does not recite a housing as claimed. Instead, Begle ‘009 discloses a milling cutter 10 (called a housing by the Examiner) that is “mounted on the vertical spindle 11” (see column 2, line 37). Thus, the milling cutter 10 is not spaced apart from the vertical spindle 11 and a *prima facie* case has not been established.

Applicants note additional deficiencies in the rejection of claim 9. Claim 9 recites “a support plate rotatably mounted on the fixture.” Begle ‘009 does not disclose a support plate rotatably mounted on a fixture. In the Office Action, the Examiner stated that base structure 13 was a fixture and that the unlabeled component “from which the bristles extends from on figure 1” was a support plate (see Office Action, page 4). The “support plate” is not mounted on base structure 13. Instead, the “support plate is “journalled on the end 26 of the rod 21” (see column 3, lines 31-32). In addition, claim 9 recites “a spindle adapted to turn about an axis of rotation” that “rotates the support plate about the axis of rotation.” Begle ‘009 does not disclose a support plate and a spindle that rotate about a common axis of rotation. Instead, Begle ‘009 discloses a milling cutter 10 that is mounted on a vertical spindle 11 and a brush 27 that is “journalled on the end 26 of the rod 21” and disposed adjacent to “the peripheral surface of the cutter blades 29” of a milling cutter 10 (see column 3, lines 31-32 and 44-45 and Figure 1). In other words, the brush 27 and the unlabeled component called a support plate by the Examiner are disposed along side the vertical spindle 11 and rotate about a different axis of rotation. Furthermore, the Examiner stated that reference number 9 was a first coupling member (see Office Action, page 4). There is no reference number 9 in Begle ‘009. This alone is sufficient to show that a *prima facie* case has not been established.

For these reasons, Applicants respectfully believe that a *prima facie* case has not been established for the rejection of independent claims 1 and 9. Since claims 2, 7, 11 and 14 depend on independent claims 1 and 9, Applicants believe that a *prima facie* case has not been established for the rejection of these claims for the same reasons.

Claims 1-2, 5-7, 9, 11 and 13-14 were rejected under § 102(b) as being anticipated by U.S. Patent No. 6,776,698 issued to Pepin (hereinafter “Pepin ‘698”). Independent claims 1 and 9 are discussed separately below.

A *prima facie* case has not been established for the rejection of claim 1. Claim 1 recites an apparatus for dislodging contaminants from a surface of a machine tool. The

machine tool has “a spindle adapted to turn about an axis of rotation” and “a housing disposed around and spaced apart from the spindle.” The apparatus includes “a support plate . . . an arbor disposed on the support plate . . . and a cleaning member disposed on and extending from the support plate.” The “cleaning member contacts a surface of the machine tool to remove contaminates.” Pepin ‘698 does not disclose an apparatus for dislodging contaminants as claimed. For example, Pepin ‘698 does not disclose a machine tool having a spindle adapted to turn about an axis of rotation and a housing disposed around and spaced apart from a spindle. Instead, Pepin ‘698 discloses two embodiments of a wheel cleaning device 10, 10a (see column 3, lines 1-2) that are “are mounted on a vehicle V (truck, trailer, automobile, etc.) for cleaning the rear W and front W’ wheels respectively during traveling of the vehicle V” (see column 3, lines 3-6). The wheel cleaning device 10, 10a is “fastened to an axle of the vehicle V via the existing bolts B” (see column 3, lines 12-13). Bristles 52 touch the “rim R of the wheel W to rub against that rim and clean it during traveling of the vehicle V” (see column 3, lines 17-20). A vehicle is not a machine tool. A mounting screw is not a spindle. A wheel is not a machine tool housing. Indeed, Applicants respectfully believe that one of ordinary skill in the art would recognize these terms of art and would not confuse a motor vehicle with a machine tool, a screw with a spindle, or a wheel with a housing since due to the clear differences in their structure, function, and/or purpose. Thus, Pepin ‘698 is non-analogous art that does not disclose or remotely suggest a machine tool as recognized by one skilled in the art.

Even if a vehicle could properly be considered a machine tool, claim 1 and its dependent claim are distinguishable from Pepin ‘698. Claim 1 recites an arbor that is “fixedly disposed on the support plate.” Pepin ‘698 does not disclose an arbor that is fixedly mounted on a support plate. Instead, Pepin ‘698 discloses that “brush 50 is freely pivotally secured to the second end 44 of the shaft 40 using screw 54” and that brush 50a is “pivotally mounted on the second end 44a of the shaft 40a” (see column 3, lines 53-55 and column 4, lines 5-7).

A *prima facie* case has not been established for the rejection of claim 9. Claim 9 recites that the cleaning member contacts a surface of the machine tool of the to remove

contaminants “when the first and second coupling members are engaged” and “the spindle rotates the support plate about the axis of rotation.” Pepin ‘698 does not disclose a spindle that rotates a support plate about an axis of rotation. In the Office Action, the Examiner stated that brush 50 was a support plate and that axle A was a spindle (see Office Action, page 5). Brush 50 is not rotated by axle A. Instead, Pepin ‘698 emphasizes that the mounting support 20 is secured “to the wheel axle so as to be in a stationary relationship relative to the wheel” while the brush 50 hangs down under force of gravity regardless of rotation of the axle (see column 4, lines 20-23 and 46-47). In other words, the axle A rotates the wheel W, not the brush 50. Since claims 11, 13 and 14 depend on independent claim 9, Applicants believe that the rejection of these claims is overcome for the same reasons.

Claims 1, 5-8, 9 and 13-15 were rejected under § 102(b) as being anticipated by U.S. Patent No. 6,839,930 issued to Shelton (hereinafter “Shelton ‘930”). Applicants respectfully believe that a *prima facie* case has not been established for the following reasons.

A *prima facie* case has not been established for the rejection of claim 1. Claim 1 recites an apparatus for dislodging surface contaminants from a surface of a machine tool. The machine tool has “a spindle” and “a housing disposed around and spaced apart from the spindle.” Shelton ‘930 does not disclose a machine tool having a spindle and a housing disposed around and spaced apart from the spindle. In the Office Action, the Examiner stated that kiln 12 was a housing and that bearing retainer 34 was a spindle. Shelton ‘930 clearly discloses that kiln 12 is not disposed around the bearing retainer 34. Instead, bearing retainer 34 is disposed outside the kiln (see Figure 1). Moreover, Applicants respectfully believe that one of ordinary skill in the art would not recognize a kiln or a kiln cleaning apparatus as a machine tool.

In addition, Shelton ‘930 does not disclose an arbor disposed on a support plate. In the Office Action, the Examiner stated that first and second ends 21, 22 of drill shaft 20 was an arbor and that boring bit 43 was a support plate. Drill shaft 20 is not disposed on boring bit 43. Instead, drill shaft 20 is separated from boring bit 43 by shank 41 (see Figure 5).

Furthermore, Shelton '930 does not disclose a cleaning member that contacts a surface of a machine tool as recited in claim 1. In the Office Action, the Examiner stated that cutting surface 45 of drill bit 40 was a cleaning member. Cutting surface 45 does not contact any portion of a machine tool. Indeed, there is absolutely no disclosure of cutting surface 45 contacting bearing retainer 34 (called a spindle by the Examiner) or kiln 12 (called a housing by the Examiner). Indeed, Shelton '930 seeks to avoid contact between any portion of the drill bit 40, such as cutting surface 45, and the kiln 12. For example, Shelton '930 states that the drill bit 40 includes a pilot bit 42 "to avoid drill bit drift and undesirable contact of drill bit 40 with protective sleeve 17 [of kiln 12] during boring procedures" (see column 3, lines 48-50). As such, Shelton '930 teaches away from the present invention. Moreover, there is absolutely no disclosure of any contact between any portion of the drill bit 40, such as cutting surface 45, once the drill bit 40 exits the protective sleeve 17 and is disposed inside the kiln 12 since the drill bit 40 is spaced apart from any kiln surface (see Figure 2).

For these reasons, Applicants respectfully believe that a *prima facie* case has not been established for the rejection of claim 1. Since claims 5-8 depend on claim 1, Applicants believe that a *prima facie* case has not been established for the rejection of these claims for the same reasons.

A *prima facie* case has not been established for the rejection of claim 9. Claim 9 recites an apparatus for dislodging surface contaminants from a machine tool. The machine tool has "a spindle" and "a housing disposed around and spaced apart from the spindle." The apparatus includes "a fixture secured to the machine tool in a stationary position, a support plate rotatably mounted on the fixture, a first coupling member disposed on the support plate, the coupling adapted to engage a second coupling member disposed on the spindle, and a cleaning member disposed on and extending from the support plate. The cleaning member contacts a surface of the machine tool to remove contaminates when the first and second coupling members are engaged the spindle rotates the support plate about the axis of rotation. Shelton '930 does not disclose an apparatus as claimed for the following reasons.

First, Shelton '930 does not disclose a machine tool as claimed. In particular, Shelton '930 does not disclose a machine tool having a spindle and a housing disposed around and spaced apart from the spindle. In the Office Action, the Examiner stated that kiln 12 was a housing and that bearing retainer 34 was a spindle. Shelton '930 clearly discloses that kiln 12 is not disposed around the bearing retainer 34. Instead, bearing retainer 34 is disposed outside the kiln (see Figure 1). Moreover, Applicants respectfully believe that one of ordinary skill in the art would not recognize a kiln or a kiln cleaning apparatus as a machine tool.

Second, Shelton '930 does not disclose a first coupling member that is disposed on a support plate. In the Office Action, the Examiner stated that attachment means 46 was a first coupling member and that boring bit 43 was a support plate. Attachment means 46 is not disposed on boring bit 43. Instead attachment means 46 is "a set screw, a shear pin, or a threaded shank" that extends through drill shaft 20 to secure the shank 41 of drill bit 40 and is clearly spaced apart from the boring bit 43 (see column 3, lines 43-47 and Figure 5).

Third, Shelton '930 does not disclose a second coupling member that is disposed on the spindle that is adapted to engage the first coupling member. In the Office Action, the Examiner stated that reference number 32 was a second coupling member and that attachment means 46 was a first coupling member (see Office Action, page 5). Reference number 32 is shown in Figure 4, but is not recited in the specification. Referring to Figure 4, reference number 32 appears to merely be a fastener that is disposed on coupling plate 31. In any event, it is clear that reference number 32 is not disposed on the bearing retainer 34 (called a spindle by the Examiner) and is not adapted to engage attachment means 46. Indeed, there is absolutely no disclosure in Shelton '930 of any engagement between attachment means 46 and reference number 32. Moreover, such engagement is not possible since attachment means 46 and reference number 32 are disposed on opposite ends of the kiln cleaning apparatus 10 (see Figures 1-4).

Fourth, Shelton '930 does not disclose a cleaning member that rotates a support plate "when the first and second coupling members are engaged." As previously discussed,

there is absolutely no disclosure of any engagement between attachment means 46 (called a first coupling member by the Examiner) and reference number 32 (called a second coupling member by the Examiner) in Shelton '930.

Fifth, Shelton '930 does not disclose a cleaning member that contacts a surface of a machine tool as discussed above with respect to claim 1.

For these reasons, Applicants respectfully believe that a *prima facie* case has not been established for the rejection of claim 9. Since claims 13-15 depend on independent claim 9, Applicants believe that the rejection of these claims is overcome for the same reasons.

A *prima facie* case has not been established for the rejection of claims 8 and 15. Claims 8 and 15 recite "a conduit disposed on the support plate, the conduit having an end connected to a source of pressurized fluid and an aperture for discharging the pressurized fluid toward the machine tool to remove contaminants." Shelton '930 does not recite a conduit disposed on a support plate. In the Office Action, the Examiner stated that boring bit 43 was a support plate and that fluid jet 50 was an aperture. The Examiner did not point out with particularity any feature as being a conduit. Nonetheless, neither the fluid jet 50 or any aspect of a pressurized fluid delivery system is disposed on boring bit 43. Instead, the fluid jet 50 is spaced apart from and bears no relationship to boring bit 43 (see Figure 5). Consequently, Applicants respectfully request that the rejection of these claims be withdrawn.

Rejection Under 35 U.S.C. § 103

Claims 3 and 12 were rejected under § 103(a) as being unpatentable over Pepin '698 in view of U.S. Patent No. 6,467,121 issued to Franzino et al. (hereinafter "Franzino '121"). Claims 3 and 12 depend on independent claims 1 and 9, respectively. Consequently, Applicants believe that these claims are allowable for the reasons previously discussed.

Claims 1-7 and 9-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over webpage "#3956-01 Var.-Speed MultiPro® Kit w/Flex-Shaft" (hereinafter "Dremel") in view of U.S. Patent No. 6,210,261 issued to Johnson (hereinafter "Johnson '261"). Applicants respectfully believe that Dremel or Johnson '261, either alone or in combination, do not disclose or suggest each and every element of the claimed invention. In the Office Action, the Examiner did not point out with particularity any aspect of the claimed invention in Dremel or Johnson '261. For example, the Examiner did not distinctly point to any part of Dremel or Johnson '261 as being a machine tool, a spindle, a housing, a cleaning member, an arbor, a first coupling member, a second coupling member, a fixture, or any of the other components recited in claims 1-7 or 9-14 (see Office Action, pages 8-9). This alone is sufficient to show that a *prima facie* case has not been established. Applicants invite the Examiner to point with particularity to the cited references so the merits of this rejection can be understood and addressed. As the rejection currently stands, a *prima facie* case has simply not been established and Applicants request that this rejection be withdrawn.

Conclusion

Applicants have made a genuine effort to respond to the Examiner's objections and rejections in advancing the prosecution of this case. Applicants believe all formal and substantive requirements for patentability have been met and that this case is in condition for allowance, which action is respectfully requested.

Respectfully submitted,

GEORGE NORDSTROM et al.

By 
Matthew M. Mietzel
Reg. No. 46,929
Attorney for Applicant

Date: February 14, 2006

BROOKS KUSHMAN P.C.
1000 Town Center, 22nd Floor
Southfield, MI 48075-1238
Phone: 248-358-4400
Fax: 248-358-3351